

MODIS IOT Weekly Report

Mission Operations Days: 2001/069 to 2001/075

March 9, 2001 20:00:00 GMT to March 16, 2001 20:00:00 GMT

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in B-side Science Mode

Blackbody	A Off; B On	Nominal
Calibration Electronics	A Off; B On	Nominal
Control Processor	A Off; B On	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	A Off; B On	Nominal
FDDI Port	A On; B Off	Nominal
FIFO Memory	1 & 2 Off; 3 & 4 On	Nominal
Format Processor	A Off; B On	SRCA sector delay of 50
Power Supply:1	Off	Nominal
2	On	Nominal
PV FPAs: VIS	A Off; B On	Nominal
NIR	A Off; B On	Nominal
SMIR	A Off; B On	Nominal
LWIR	A Off; B On	Nominal
PC FPA: LWIR	A Off; B On	Nominal
Radiative Cooler:		
Outgas Heaters	All Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	A Off; B On	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal

Survival Heaters:	PS1	Enabled	Nominal
	PS2	Enabled	Nominal
Timing Generator		A Off; B On	Nominal
Flight Software		Rev BD + 2 patches	Nominal
Inhibit Ids Set		None	Nominal
TMONs enabled		68	Nominal

This Week's Completed MODIS Activities:

Saturday, March 10, 2001
None

Sunday, March 11, 2001
None

Monday, March 12, 2001
None

Tuesday, March 13, 2001
 072/20:07:00 First attitude disturbance due to config. change for maneuver
 072/21:30:51 ATC Move Formatter to Night ahead by 3:23 to ensure 50/50 day/night
 072/21:32:52 FOT ATC commanding: Begin slew to -16.512 degrees
 072/21:40:14 ATC Set Formatter to Day Rate
 072/21:40:16 ATC Set SCIABNORM Flag to ABNORM
 072/21:40:18 ATC PC DC Restore to OFF
 072/21:40:20 ATC PV DC Restore to OFF
 072/21:40:22 ATC Sector Rotation to -3072 (EA to SV and OBCs)
 072/21:46:52 ATC Sector Rotation to Zero (Normal)
 072/21:46:54 ATC PV DC Restore to ON
 072/21:46:56 ATC PC DC Restore to ON
 072/21:46:58 ATC Set SCIABNORM Flag to NORM
 072/21:47:00 ATC Set Formatter to Night Rate
 072/21:54:40 FOT ATC commanding: Return to nominal attitude
 072/22:06:00 Final attitude disturbance due to config. change for maneuver
 072/22:27:01 ATC Move Formatter to Day later by 3.23 to ensure 50/50 day/night

Wednesday, March 14, 2001
 073/21:21:00 ATC OA16: SDSM SCREENED
 073/22:08:48 – 22:42:21 ATC OA19: SRCA Full Radiometric
 073/22:56:05 ATC OA15: SDSM OPEN

Thursday, March 15, 2001
None

Friday, March 16, 2001
None

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

Saturday, March 17, 2001
None

Sunday, March 18, 2001
None

Monday, March 19, 2001
None

Tuesday, March 20, 2001
None

Wednesday, March 21, 2001
None

Thursday, March 22, 2001
None

Friday, March 23, 2001
None

Maneuvers:

There will be no MODIS roll maneuver in April because the roll angle would have been too great.
Next roll maneuver will be scheduled in May.

MODIS Anomalies:

There appears to be a problem processing the science data collected during the SRCA activities on Friday, March 2nd, 2001 (day 061). Specifically, this may be related to the change in sector

sizes for the Solar Diffuser and SRCA. If this is the cause, it will affect data from 061/14:06:30 to 061/18:21:56 GMT. This problem is not yet well understood.

General Instrument Comments:

MODIS is in Science Mode on the B-side with the SVD and NAD open, operating with the Formatter Resolution Flight Software Patches (FRFSP).

MODIS Telemetry Trends:

Temperature trends are correlating with the solar beta angle.

Non-MODIS Significant Events:

None

Limited Life Item Status:

SRCA 10W Lamp #1: 182.5 of 500 hours

SRCA 10W Lamp #2: 141.1 of 500 hours

SRCA 10W Lamp #3: 150.3 of 500 hours

SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 557.2 of 4000 hours

SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1561 of 3022 Movements

Nadir Aperture Door: 532 of 1316 Movements

Space View Door: 437 of 1316 Movements